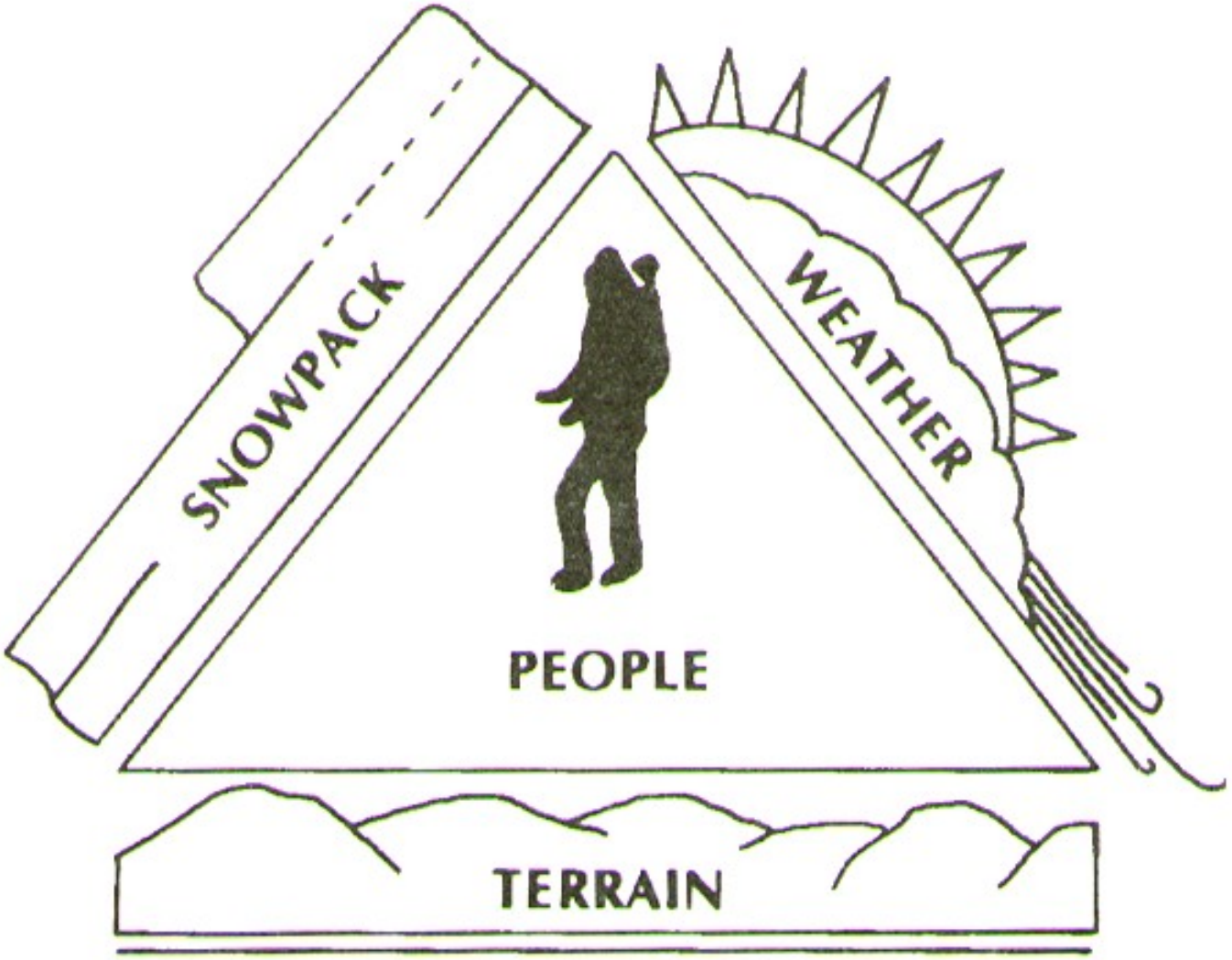
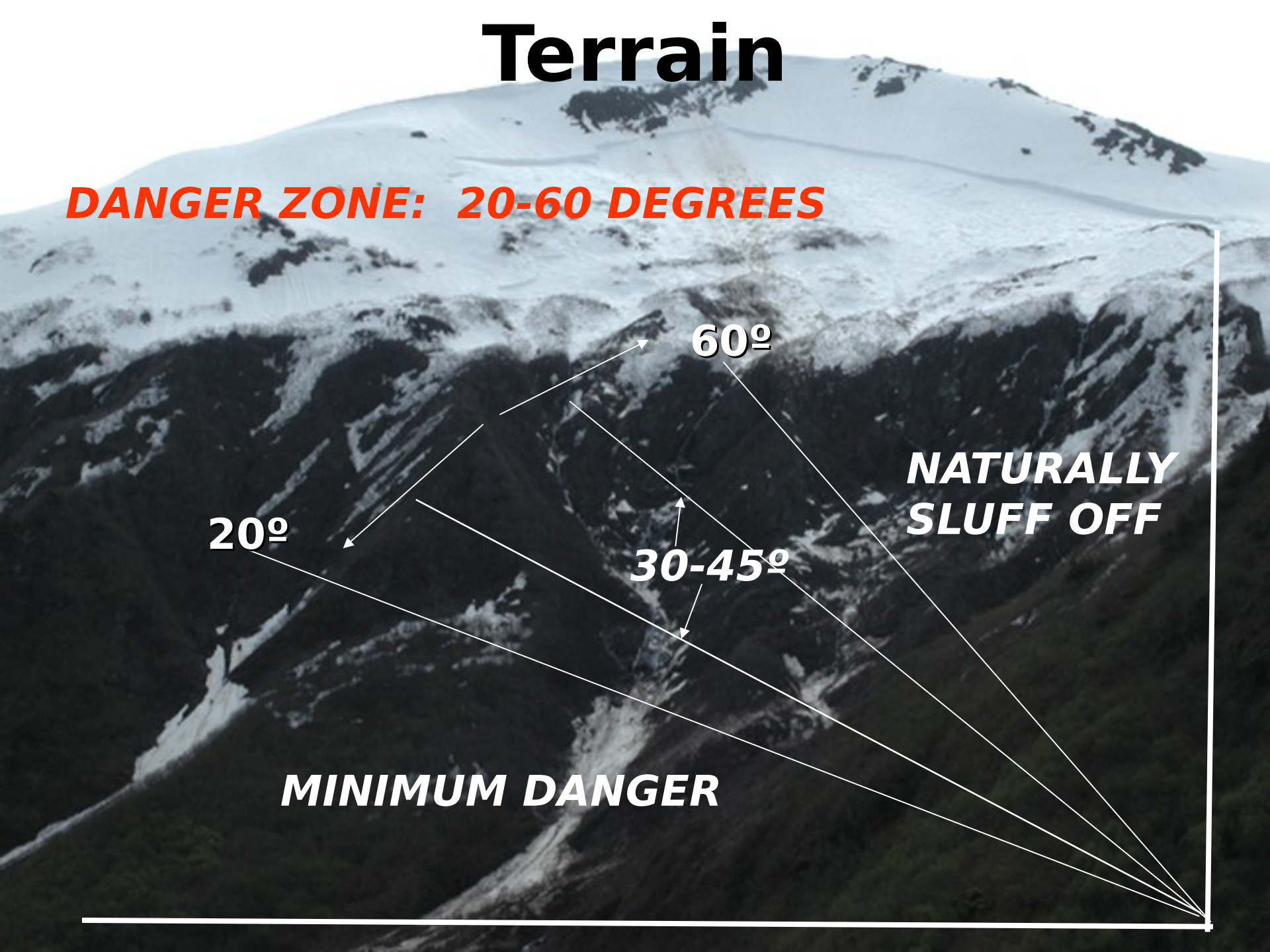
RECOGNIZING THE AVANLANCHE HAZARDS



GARRISON
FWA
SUSTAIN SUPPORT DEFEND
SAFETY OFFICE

Terrain


DANGER ZONE: 20-60 DEGREES
60º
NATURALLY
SLUFF OFF
20º
30-45º
MINIMUM DANGER

Terrain

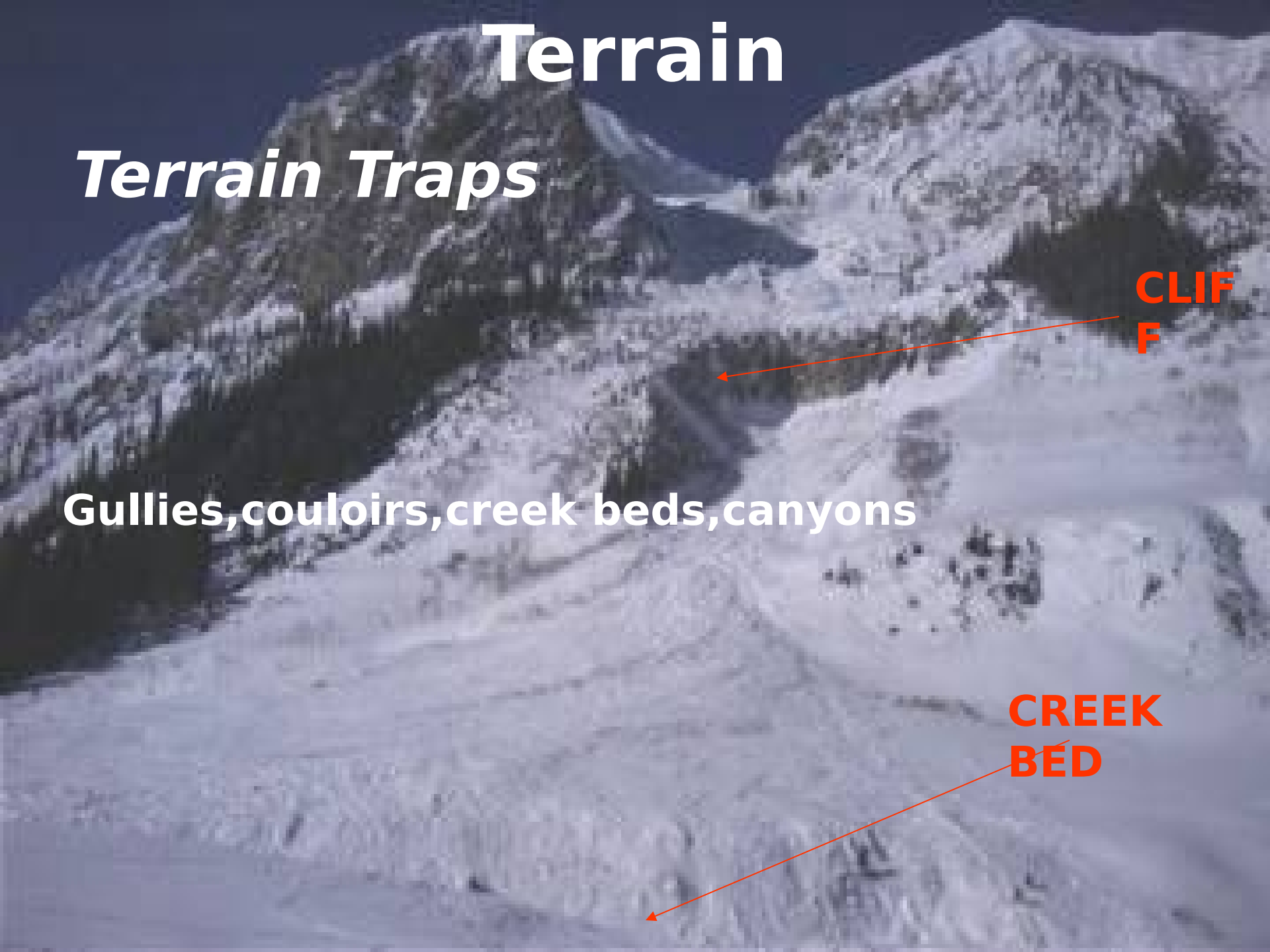
GRASSY OR SMOOTH ROCK MAKES FOR AN UNSTABLE SLOPE

JUMBLED ROCK, DEADFALL WILL ANCHOR BOTTOM LAYERS

TREES WILL ANCHOR SURROUNDING SNOW,BUT
BEWARE OF SNOW ABOVE TREELINE COMING DOWN

Terrain

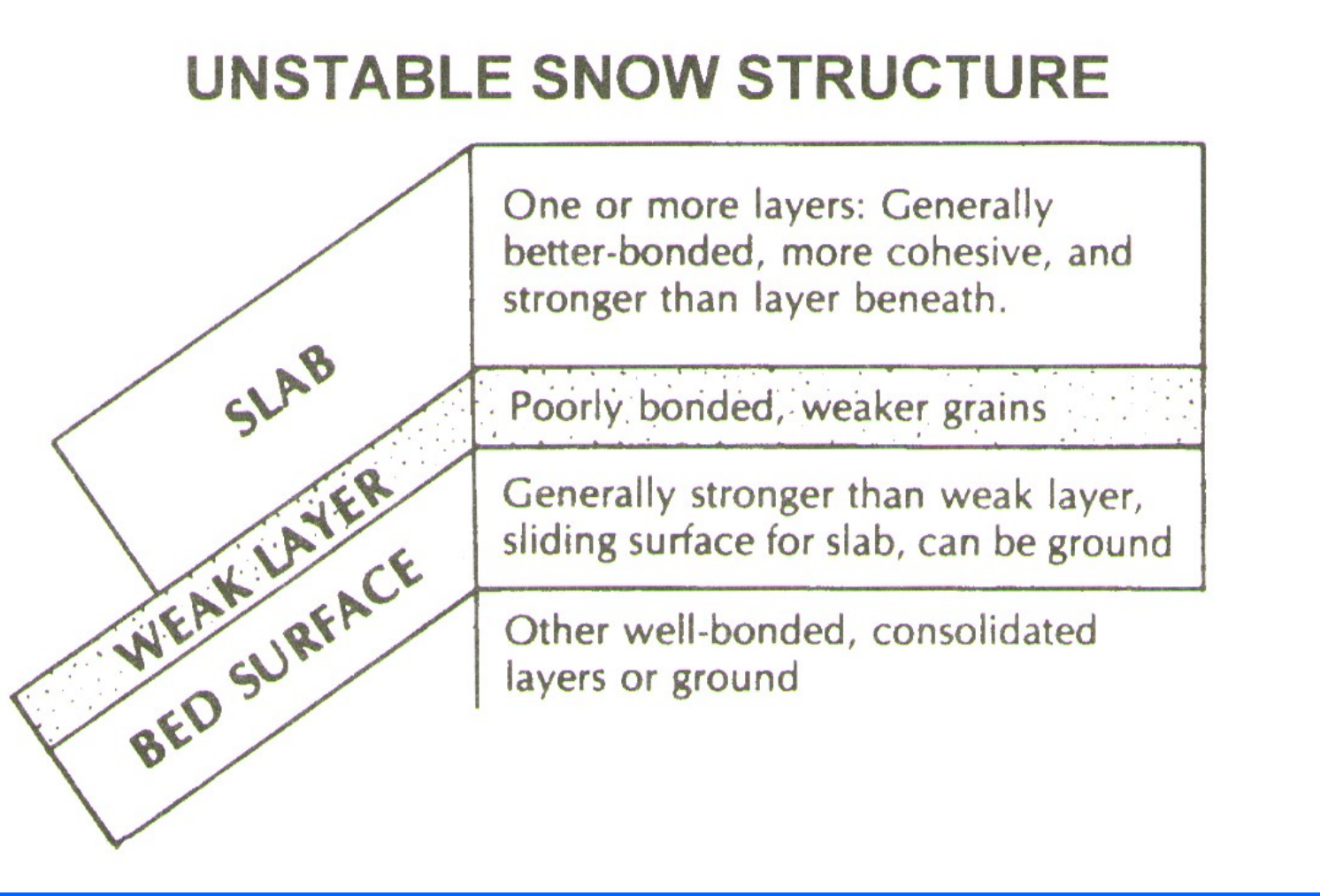
Terrain Traps



Gullies,couloirs,creek beds,canyons

Snowpack

Multiple Layers Within an Avalanche


UNSTABLE SNOW STRUCTURE
SLAB
WEAK LAYER
BED SURFACE
One or more layers: Generally better-bonded, more cohesive, and stronger than layer beneath.
Poorly bonded, weaker grains
Generally stronger than weak layer, sliding surface for slab, can be ground
Other well-bonded, consolidated layers or ground

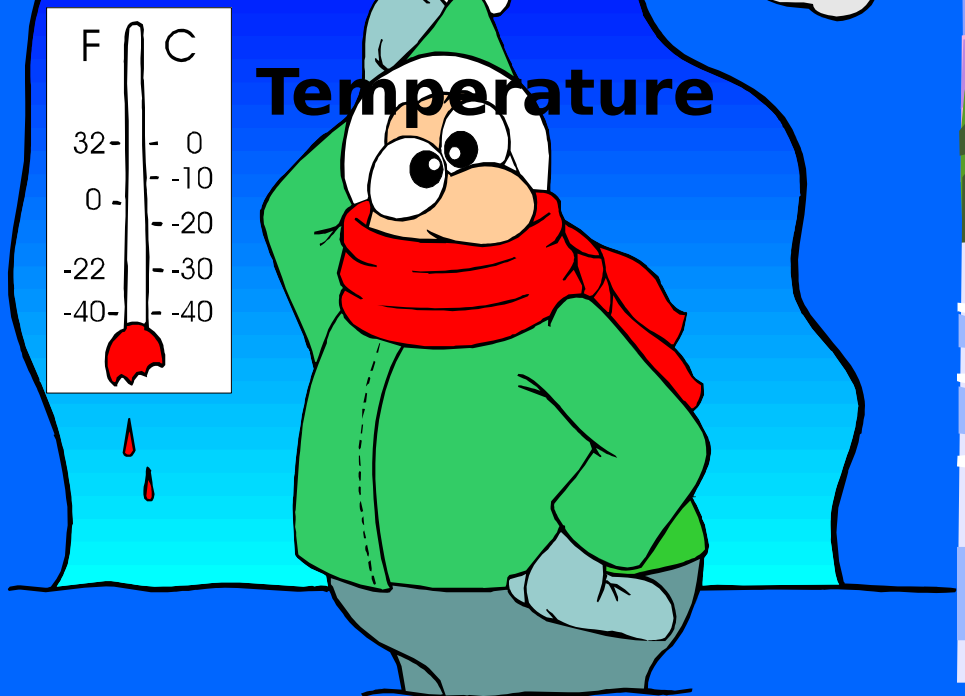
Weather

Wind

Precipitation

Slope Aspect

Temperature

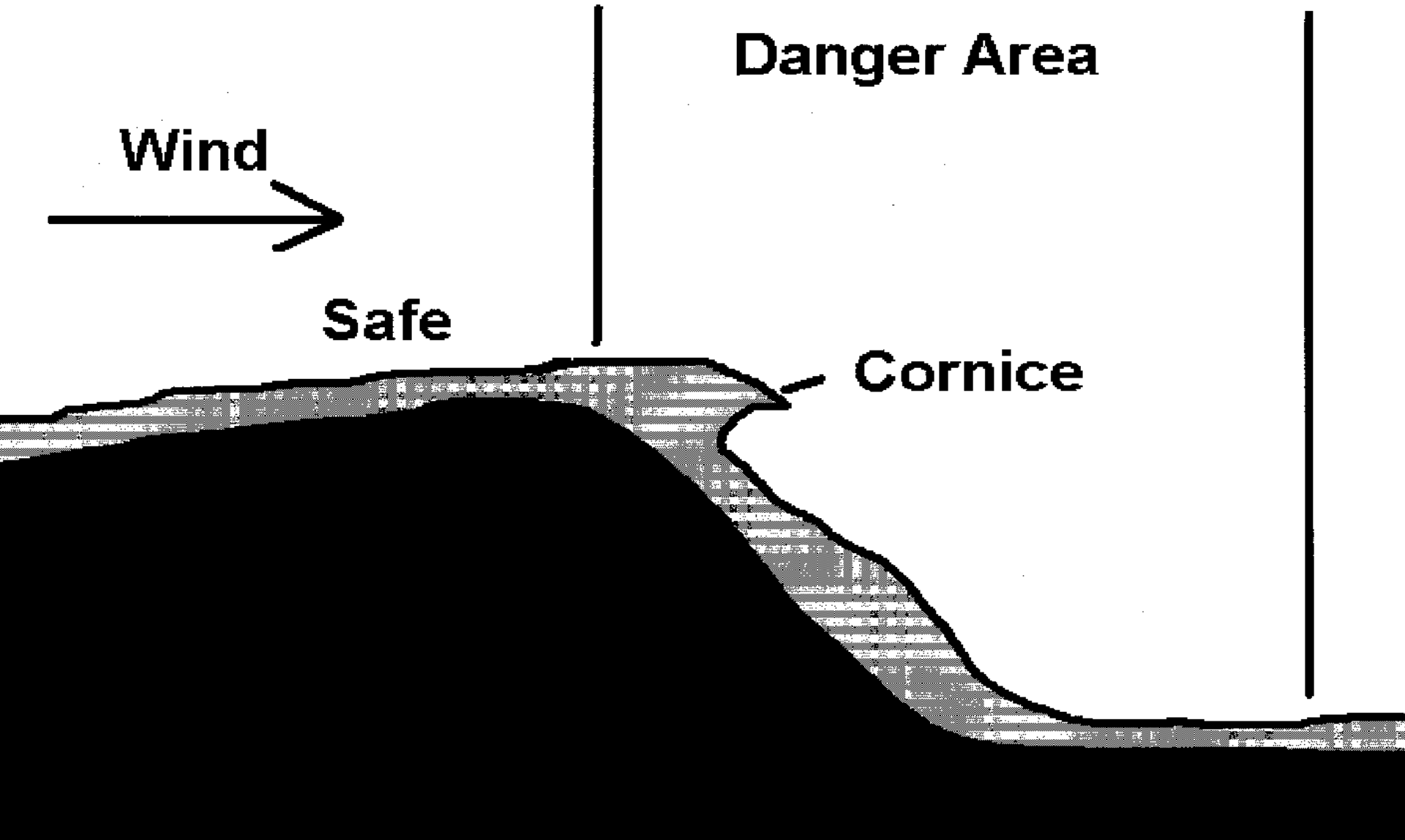


Wind Loading

WIND MOVES SNOW FROM ONE AREA TO ANOTHER FORMING A WIND SLAB

Wind Loading

Cornice



Precipitation

- Snow Fall
- Slush (Rain Caused)

Slope Aspect

- North facing slopes are avalanche prone in mid-winter
- South facing slopes are more dangerous in spring and on sunny days

Temperature

Wet slab avalanches from excess warmth or rain

Determines bonding of the snow through the freeze thaw cycle

Summary: General indicators of avalanche prone terrain

- Evidence of previous slides
- Steep slopes between 30-45 degrees
- Recent heavy snowfall adding to the weight of snowpack
- Visible fracture lines in the snow
- Audible settling of the snowpack
- Severe temperature changes
- Lee slopes
- Snow plumes and high winds
- Slushy spring snow
- Outside force to break the stability

Please access the Garrison Website

https://fwa.pac.army.mil/postsafety/winter_safety.htm

OR

Contact Northern Warfare Training Center at

353-1245

For further information on Avalanche